

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of

ALLAN L. MELBY ET AL.

Serial No. 09/159,843

Filed: September 24, 1998

Entitled:

AMPHOLYTE POLYMERS FOR USE  
IN PERSONAL CARE PRODUCTS

: Group Art Unit 1714

: Examiner P. Michl

: Attorney Docket No. C-2047DA

RECEIVED

MAR 05 1999

GROUP 1700

DECLARATION OF RICHARD LAMAR

I, Richard Lamar, being duly sworn hereby declares as follows:

1. I received a B.S. in Biology in 1985 from Eastern Connecticut State University and a B.S. in Chemistry in 1994 from the University of Pittsburgh.

2. I have worked at Calgon Corporation from 1989 to the present, and was employed by Calgon Corporation as a chemist when I performed the tests described below.

3. In performing research relating to the present invention, I performed the following testing to evaluate the wet comb results for No-Lye relaxers both with and without one of the terpolymers encompassed by the claims of the present invention. Specifically, the terpolymer was comprised of acrylic acid, MAPTAC, and methyl acrylate in a ratio of 45:45:10. This terpolymer is commercially available from Calgon Corporation as Merquat® 2001.

Six commercial No-Lye Relaxers were purchased for the study: Soft & Beautiful (Pro-Line Corp.), Creme of Nature (Roux Laboratories, Inc.), African Pride (A.P. Products), Gentle Treatment (Johnson Products), Dark & Lovely (Carson Products Co.), Soft Sheen Optimum Care (Soft Sheen Products, Inc.). The creme relaxer base and activator for each of these products was divided in half. One half was used as a control and Merquat® 2001 was added at 0.26% active to the activator of the other half. One exception was made in the case of the Dark and Lovely product, which does not contain water in the activator. For that product, the Merquat® 2001 was added to the creme relaxer base.

For each product, the activator was added to the relaxer and mixed with a wooden tongue depressor until uniform. Six grams of each product were applied to 2 gram afro hair (purchased from DeMeo Brothers) tresses for 18 minutes. The tresses were then rinsed for two minutes with running de-ionized water to remove all the relaxer base. The hair tresses were then washed with a neutralizing shampoo which contained no polymer or conditioning agent. These tresses were then evaluated for wet combing using the Diastorm mini tensile tester.

The results of this evaluation can be seen in the attached graph labelled MTT 9821. As is clear from the graph, the addition of the Merquat® 2001 product improved the wet comb properties of all of the commercially available relaxers. The greatest improvements were seen with the Soft & Beautiful and Creme of Nature relaxers. This experiment therefore demonstrates that the terpolymers of the present invention provide improved wet comb results when used in conjunction with relaxer compounds.

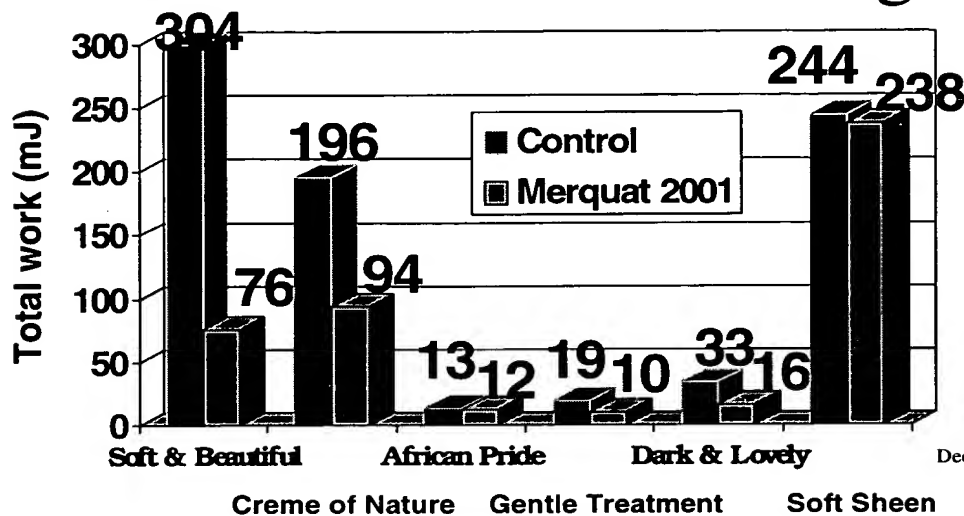
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Richard R. Lamar  
Richard Lamar

2/25/99  
Date

# No-Lye Relaxers

## MTT 9821 Wet Combing



December 15, 1998